DATA NAME: DRG

COVERAGE AREA: Statewide

LOCATION: /gisraster/drg

DATA DESCRIPTION:

Digital Raster Graphics are PackBit-compressed, trimmed, tiff images of USGS 7.5 minute quadrangle maps. There are 2,851 images covering the entire state of California. DRGs were created by Teale Data Center. These DRGs have in turn been trimmed to the map neat line and reprojected by Caltrans Office of GIS to Albers NAD83 projection.

VITAL STATISTICS:

Resolution: 400 d.p.i., approximately 1.5 meters per pixel

Projection: Albers Units: Meters

 1st Std. Parallel:
 34 00 00 (34.0 degrees N)

 2nd Std. Parallel:
 40 30 00 (40.5 degrees N)

 Longitude of Origin:
 -120 00 00 (120.0 degrees W)

Latitude of Origin: 00 00 00 (0.0 degrees)

False Easting (X shift): 0

False Northing (Y shift): -4,000,000
Datum: NAD 83
Spheroid: Clarke 1866
Source: U.S.G.S.
Source Media: Map sheets

Source Projection: vary
Source Units: Meters

Source Scale: 1:24,000, 11 DRGs are 1:25,000

Capture Method: Scanned

Conversion Software: ARC/INFO rev. 7.2.1

Data Structure: Raster

Size of DRGs: Range 2 - 40 MB, 13 MB on average per image

40 Gigabytes statewide

Use limitation: None - public domain data

Data Updated: December 1998

FILE NAMES

There are 64 DRGs in each 1 degree block of longitude and latitute, filling 8 rows and 8 columns, except for incomplete blocks along the state boundary. DRG files are named according to USGS 'ocode' designation.

example: t35116a7.tif
35 degree of latitude
116 degree of longitude
a row (a-h south to north)
7 column (1-8 east to west)

Some quad maps of islands and coastal areas are irregularly sized and/or positioned. File names for these images are determined by which quad their south east corner falls in. In three instances this creates a discrepancy with the USGS code:

| Filename | Map Name | USGS ocode |
|----------|----------------------|------------|
| t40124a2 | SHUBRICK PEAK | o40124b2 |
| t33118f2 | LONG BEACH | o33118g2 |
| t33118d8 | SANTA BARBARA ISLAND | o33119d1 |

TFW FILES

Each DRG has an accompanying 'world' file with the same file name, but with a .tfw extension, that contains geo-referencing information:

example: t35116a7.tfw

1.52786215012960 pixel size (meters)
0.000000000000000 rotation factor
0.00000000000000 pixel size
-1.52786215012960 pixel size
284543.57694197021192 image min x (meters) (NW -316411.17369714472443 image max y (meters) Corner)

The min x and min y coordinates relate to the image itself, and not the latitude longitude values at the map corner. Coordinates are in albers projection.

COLORS

Colors on the DRGs have been normalized to 13 RGB values:

| $0 \ 0 \ 0$ | black |
|-------------|--------------|
| 255 255 255 | white |
| 91 159 230 | dark blue |
| 230 45 30 | red |
| 162 96 71 | dark brown |
| 210 255 177 | green |
| 197 101 197 | dark magenta |

255 240 0 yellow 202 225 245 light blue 255 202 197 light red 250 202 250 light magenta 230 230 230 light grey 222 167 146 light brown

DRG.DBF - dbase file that contains metadata for each quad. This file is found at /gisraster/drg/drg.dbf

DRG.DBF fields:

| COL | ITEM NAME | WDTH | OPUT | TYP | N.DEC |
|-----|------------|------|------|--------------|-------|
| 1 | FILENAME | 8 | 8 | C | _ |
| 9 | MAPNAME | 30 | 30 | \mathbf{C} | - |
| 39 | MAPNAME25 | 20 | 20 | \mathbf{C} | - |
| 59 | CD | 3 | 3 | \mathbf{C} | - |
| 62 | FILESIZE | 2 | 2 | I | - |
| 64 | MAPSCALE | 8 | 8 | \mathbf{C} | - |
| 72 | FORMAT | 20 | 20 | C | - |
| 92 | REF_CODE | 25 | 25 | \mathbf{C} | - |
| 117 | YEAR | 4 | 4 | C | - |
| 121 | YRORIGMAP | 4 | 4 | C | - |
| 125 | YRREVISION | 4 | 4 | C | - |
| 129 | YRAIRPHOTO | 4 | 4 | C | - |
| 133 | YRFIELDCK | 4 | 4 | C | - |
| 137 | YRPHTOTOPO | 4 | 4 | C | - |
| 141 | YRREVSOURC | 4 | 4 | C | - |
| 145 | YRPHTOINSP | 4 | 4 | C | - |
| 149 | LIBUPDATE | 8 | 8 | C | - |
| 157 | SOUTH | 8 | 10 | F | 5 |
| 165 | NORTH | 8 | 10 | F | 5 |
| 173 | EAST | 8 | 10 | F | 5 |
| 181 | WEST | 8 | 10 | F | 5 |
| 189 | SE_COR_LON | 9 | 9 | C | - |
| 198 | SE_COR_LAT | 9 | 9 | C | - |
| 207 | CONTOURINT | 10 | 10 | C | - |
| 217 | CONINTRMIT | 10 | 10 | C | - |
| 227 | VERT_DATUM | 15 | 15 | C | - |
| 242 | STATE1 | 2 | 2 | C | - |
| 244 | STATE2 | 2 | 2 | C | - |
| 246 | TYPE | 1 | 1 | C | - |
| 247 | PROJECTION | 80 | 80 | C | - |

FILENAME USGS coding convention for 7.5 X 7.5 minute quads.

MAPNAME Name of 7.5 X 7.5 minute quad map

MAPNAME25 Name of 1:25,000 scale, 7.5 X 15 minute quad map

(see note below)

CD CD number - index to which CD the image is on

#32A and #32B replace #32 due to increased file size

of updated DRGs

FILESIZE Approximate size of tiff image file in megabytes.

Trimmed version images are about 10% smaller than

untrimmed.

MAPSCALE Scale of scanned map

FORMAT Dimension in Minutes of map, N-S X E-W

REF CODE USGS reference code

YEAR Most recent year that appears on the map.

YRORIGMAP Year of original map

YRREVISION Year of map revision

YRAIRPHOTO Year of aerial photography used for revision

YRFIELDCK Year of field check

YRPHTOTOPO Year of aerial photography used for topography base

YRREVSOURC Year of source data for revision

YRPHTOINSP Year of photo inspection

LIBUPDATE Date (YYYYMMDD) of updated image replacement in Teale

library

SOUTH Southern extent of map area, decimal degrees

NORTH Northern extent of map area, decimal degrees

EAST Eastern extent of map area, decimal degrees

WEST Western extent of map area, decimal degrees

(SOUTH, NORTH, EAST and WEST are used for trimming DRGs

to their neatline, or in the case of irregular DRGs, to

the outer extent of the map area.

SE_COR_LON Longitude at south-east corner, degrees minutes seconds

SE_COR_LAT Latitude at south-east corner, degrees minutes seconds

CONTOURINT Contour interval

CONINTRMIT Intermittant contour interval

VERT_DATUM Vertical Datum

STATE1 State primarily covered in the image

STATE2 State secondarily covered in the image

TYPE Type (size) of map, to identify non-standard size maps

 S
 Standard
 7.5 X 7.5 Minute

 T
 Tall
 >7.5 X 7.5 Minute

 W
 Wide
 7.5 X > 7.5 Minute

 O
 Oversize
 >7.5 X > 7.5 Minute

 2
 Double
 7.5 X 15.0 Minute

I Island vary

PROJECTION Projection of map sheet

NOTES Notations

1:25,000 SCALE 7.5' x 15' USGS TOPO MAPS

21 DRGs are images of 1:25,000 scale 7.5' x 15' USGS topo maps. These USGS products were created in place of the 1:24,000 7.5 minute format in limited areas of the United States, and each map sheet covers an area equivalent to two adjacent 1:24,000 quads. These maps occur in portions of Trinity, Shasta and Tehama counties, and one area on the California-Nevada border. These DRGs are named according to their 1:24,000 map name. For example, ONO EAST (040122d5) and ONO WEST (040122d6) are identical images of the ONO 7.5 X 15 Minute map.

| FILENAME | 1:24,000 MAP NAME | 1:25,000 MAP NAME |
|----------|-----------------------------|-------------------|
| | | |
| o39119h8 | SEVEN LAKES MOUNTAIN | DOGSKIN MTN |
| o40122a7 | SOUTH YOLLA BOLLY MOUNTAINS | SOUTH YOLLA BOLLY |
| o40122a8 | SOLOMON PEAK | SOUTH YOLLA BOLLY |
| o40122b7 | TOMHEAD MOUNTAIN | NORTH YOLLA BOLLY |
| o40122b8 | NORTH YOLLA BOLLY | NORTH YOLLA BOLLY |
| o40122c5 | CHICKABALLY MTN EAST | CHICKABALLY MTN |
| o40122c6 | CHICKABALLY MTN WEST | CHICKABALLY MTN |
| o40122c7 | BEEGUM | BEEGUM |
| o40122c8 | PLATINA | BEEGUM |
| o40122d5 | ONO EAST | ONO |
| o40122d6 | ONO WEST | ONO |
| o40122d7 | ARBUCKLE MOUNTAIN | CHANCHELULLA PEAK |
| o40122d8 | CHANCHELULLA PEAK | CHANCHELULLA PEAK |
| o40123a1 | WRIGHTS RIDGE | FOUR CORNERS ROCK |
| o40123a2 | FOUR CORNERS ROCK | FOUR CORNERS ROCK |
| o40123b1 | BLACK ROCK MOUNTAIN | BLACK ROCK MTN |
| o40123b2 | SWIM RIDGE | BLACK ROCK MTN |
| o40123c1 | PONY BUCK PEAK | PONY BUCK PEAK |
| o40123c2 | SMOKY CREEK | PONY BUCK PEAK |
| o40123d1 | WILDWOOD | DUBAKELLA MTN |
| o40123d2 | DUBAKELLA MOUNTAIN | DUBAKELLA MTN |

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DOCUMENTATION DATE: 12/15/1998, 3/23/99, 5/8/00, 8/21/01